

United States Patent and Trademark Office

9

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,897	08/11/2004	John M. Tiesler	04966 (LC 0163 PUS)	4896
36014 7590 02/13/2007 ARTZ & ARTZ, P.C. 28333 TELEGRAPH ROAD, SUITE 250			EXAMINER	
			FIGUEROA, FELIX O	
SOUTHFIELD, MI 48034			ART UNIT	PAPER NUMBER
			2833	
SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
	NTHS	02/13/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
	10/710,897	TIESLER ET AL.
Office Action Summary	Examiner	Art Unit
	Felix O. Figueroa	2833
The MAILING DATE of this communicate Period for Reply	ation appears on the cover sheet wit	th the correspondence address
A SHORTENED STATUTORY PERIOD FOR WHICHEVER IS LONGER, FROM THE MAI - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this communi - If NO period for reply is specified above, the maximum statut - Failure to reply within the set or extended period for reply will Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	LING DATE OF THIS COMMUNIC 37 CFR 1.136(a). In no event, however, may a re- ication. ory period will apply and will expire SIX (6) MONT I, by statute, cause the application to become ABA	CATION. Exply be timely filed THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).
Status		
1)) This action is non-final. r allowance except for formal matte	•
Disposition of Claims		
4)	withdrawn from consideration. is/are rejected.	
Application Papers		
9) The specification is objected to by the E 10) The drawing(s) filed on is/are: a Applicant may not request that any objection Replacement drawing sheet(s) including the 11) The oath or declaration is objected to be	accepted or b) objected to be not on to the drawing(s) be held in abeyanded correction is required if the drawing(s)	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
<u> </u>	ocuments have been received. Ocuments have been received in Apother the priority documents have been all Bureau (PCT Rule 17.2(a)).	oplication No received in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview S	ummary (PTO-413)
 2) Notice of Draftsperson's Patent Drawing Review (PTC 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date)-948) Paper No(s)/Mail Date Iformal Patent Application —

Art Unit: 2833

DETAILED ACTION

Claim Objections

Claims 1, 2, 6-12, 14, 16-18 and 21-24 are objected to because of the following informalities:

In claims 1, 16 and 24, "t" should be --T--, in order to accurately describe the invention. Similar corrections should be made to the specification.

In claim 6 line 2, "the" should be deleted; and --of the plurality-- should be inserted after "one".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 6, 7, 9-12, 14, 16-18, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutta (US 5,599,086) in view of Marmaropoulos et al. (US 6,854,988).

Dutta discloses vehicle overhead module powerstrip assembly comprising: at least one overhead attachment strip (18) configured to couple to a vehicle overhead structure; at least one electrically conductive strip (50) coupled to the at least one attachment strip; and a plurality of modular connector (at 54,56, see col. 2 lines 55-57), each comprising a plurality of electrical contacts having a plurality of attachment

Art Unit: 2833

positions (Fig.1) along the at least one electrically conductive strip, the plurality of modular connector removable from the conductive strip (col.4 lines 28-29), positioned interchangeable with each other, and configured to couple an overhead electronic module (24) to the at least one electrically conductive strip.

Dutta discloses substantially the claimed invention except for the specific configuration of the attachment strip. Marmaropoulos teaches at least one attachment strip (10) including a t-shaped main center member having a t-body and a t-cap; at least one electrically conductive strip (50) coupled to the at least one attachment strip, the at least one electrically conductive strip comprising a power strip positioned on the t-body and a ground strip (center 50) positioned on the t-cap; a plurality of modular connectors (at 100) each of which comprising a plurality of electrical contacts (110, 115, 150) having a plurality of attachment positions along the at least one electrically conductive strip, the plurality of modular connectors removable from the at least one electrically conductive strip, position interchangeable with each other, and configured to couple at least one electronic module (100) to the at least one electrically conductive strip; at least one flange (20) that covers at least a portion of the at least one electrically conductive strip, the at least one flange is flexible and flexes outward when the plurality of modular connectors are removed to at least partially cover and prevent access to the at least one conductive strip to enclose/seal the conductive member (see Abstract). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an attachment strip including a T-shaped member and at

Art Unit: 2833

least one flexible flange, as taught by Marmaropoulos, to enclose/seal the conductive member.

Regarding claims 2 and 3, Dutta, as modified by Marmaropoulos, discloses the at least one attachment strip being a single extruded component; comprising at least one flange (not labeled, Figs. 2 and 3) that covers at least a portion of the at least one electrically conductive strip.

Regarding claim 6, Dutta, as modified by Marmaropoulos, discloses the at least one attachment strip applying pressure on the at least one modular connector to maintain electrical contact between the at least one electrically conductive strip and the at least one modular connector.

Regarding claim 7, Dutta, as modified by Marmaropoulos, discloses the at least one electrically conductive strip comprising a positively charged electrically conductive strip (50) and a negatively charged electrically conductive strip (52).

Regarding claim 9, Marmaropoulos discloses the plurality of electrical contacts comprising a ground contact, having spring characteristics, such that it is in compression when in contact with the a ground strip of the at least one electrically conductive strip.

Regarding claim 10, Marmaropoulos discloses the at least one overhead attachment strip comprising a plurality of channels, at least a portion of the plurality of electrical contacts extend into the plurality of channels and are in contact with the at least one electrically conductive strip therein.

Art Unit: 2833

Regarding claim 11, Marmaropoulos discloses the plurality of electrical contacts comprising a first power contact; and a second power contact having a physical spreading resistance relative to the first power contact to maintain electrical contact with the at least one electrically conductive strip.

Regarding claim 12, Dutta, as modified by Marmaropoulos, discloses the plurality of electrical contacts being slidable along the at least one electrically conductive strip.

Regarding claim 14, Dutta, as modified by Marmaropoulos, discloses the at least one modular connector comprises at least one insulator separating the plurality of electrical contacts; and the insulator comprising a plurality of module attachment holes (Fig. 1 of Marmaropoulos).

Regarding claim 16, Dutta discloses a vehicle overhead console comprising: at least one track (62); a plurality of overhead console modules (24) transitional and position interchangeable along the at least one track; and at least one vehicle overhead module powerstrip assembly (54,56) comprising: at least one overhead attachment strip (18) configured to couple to a vehicle overhead structure; at least one electrically conductive strip (50,52) coupled to the at least one attachment strip; and a plurality of removable and modular connector (at 54,56) coupled to the overhead modules and comprising a plurality of electrical contacts (54,56) having a plurality of attachment positions along the at least one electrically conductive strip, the plurality of modular connector configured to couple and allow separation of the plurality of overhead electronic modules (col.4 lines 28-29) to and from the at least one electrically conductive strip.

Art Unit: 2833

Dutta discloses substantially the claimed invention except for the specific configuration of the attachment strip. Marmaropoulos teaches at least one attachment strip (10) including a t-shaped main center member having a t-body and a t-cap; at least one electrically conductive strip (50) coupled to the at least one attachment strip, the at least one electrically conductive strip comprising a power strip positioned on the t-body and a ground strip (center 50) positioned on the t-cap; a plurality of modular connectors (at 100) each of which comprising a plurality of electrical contacts (110, 115, 150) having a plurality of attachment positions along the at least one electrically conductive strip, the plurality of modular connectors removable from the at least one electrically conductive strip, position interchangeable with each other, and configured to couple at least one electronic module (100) to the at least one electrically conductive strip; at least one flange (20) that covers at least a portion of the at least one electrically conductive strip, the at least one flange is flexible and flexes outward when the plurality of modular connectors are removed to at least partially cover and prevent access to the at least. one conductive strip to enclose/seal the conductive member (see Abstract). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an attachment strip including a T-shaped member and at least one flexible flange, as taught by Marmaropoulos, to enclose/seal the conductive member.

Regarding claim 17, Dutta, as modified by Marmaropoulos, discloses the at least one overhead attachment strip being coupled to the at least one track via at least one fastening device (70).

Art Unit: 2833

Regarding claim 18, Dutta, as modified by Marmaropoulos, discloses the at least one electronic module having an infinite number of module positions relative to the track (Fig.1) and receives power from the at least one electrically conductive strip in each of the module positions.

Regarding claim 23, Dutta, as modified by Marmaropoulos, discloses the modules comprising a plurality of electronic modules.

Regarding claim 24, Dutta discloses a vehicle overhead console comprising: at least one track (62); at least one vehicle overhead console module powerstrip assembly (54,56) coupled to the at least one track and comprising; at least one overhead attachment strip (18) configured to couple to a vehicle overhead structure; and at least one electrically conductive strip (50,52) coupled to the at least one attachment strip; and a plurality of overhead modules (24) transitional, removable, and position interchangeable along the at least one track and comprising at least one modular connector (at 54,56) having at least one electrical contact for coupling to the at least one electrically conductive strip.

Dutta discloses substantially the claimed invention except for the specific configuration of the attachment strip. Marmaropoulos teaches at least one attachment strip (10) including a t-shaped main center member having a t-body and a t-cap; at least one electrically conductive strip (50) coupled to the at least one attachment strip, the at least one electrically conductive strip comprising a power strip positioned on the t-body and a ground strip (center 50) positioned on the t-cap; a plurality of modular connectors (at 100) each of which comprising a plurality of electrical contacts (110, 115, 150)

Art Unit: 2833

having a plurality of attachment positions along the at least one electrically conductive strip, the plurality of modular connectors removable from the at least one electrically conductive strip, position interchangeable with each other, and configured to couple at least one electronic module (100) to the at least one electrically conductive strip; at least one flange (20) that covers at least a portion of the at least one electrically conductive strip, the at least one flange is flexible and flexes outward when the plurality of modular connectors are removed to at least partially cover and prevent access to the at least one conductive strip to enclose/seal the conductive member (see Abstract). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use an attachment strip including a T-shaped member and at least one flexible flange, as taught by Marmaropoulos, to enclose/seal the conductive member.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutta in view of Tiesler et al. (US 6,575,528).

Dutta discloses substantially the claimed invention except for the location of the strip. Tiesler teaches the use of a strip along a longitudinal centerline of a vehicle, thus improving accessibility of the modules. Therefore, it would have been obvious to a

Art Unit: 2833

person of ordinary skill in the art at the time the invention was made to form the strip of Dutta along a longitudinal centerline, as taught by Tiesler, to improve accessibility of the modules.

Regarding claims 21 and 22, Tiesler teaches the use of a variety of modules, such as audio and video modules. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the assembly of Dutta with different types of modules, as taught by Tiesler, to provide a secure and versatile positioning of the modules.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2833

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Felix O. Figueroa Primary Examiner

July O State

Art Unit 2833